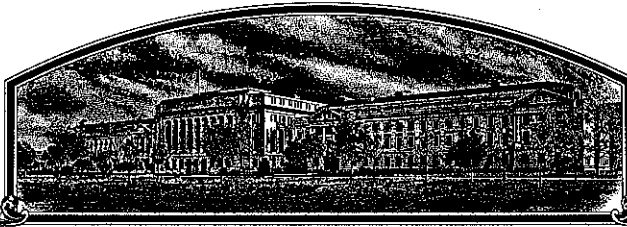


No.

9100140



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Northrup King Co.**

Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Coker 9024'

In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed  
at the City of Washington, D.C.  
this 29th day of October in  
the year of our Lord one thousand nine  
hundred and ninety-three.

Attest:

*Kenneth H. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Mike Esny*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <b>Northrup King Company</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. <b>C 86-24</b>	3. VARIETY NAME <b>Coker 9024</b>
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) <b>P. O. Box 959 Minneapolis, MN 55440</b>		5. PHONE (include area code) <b>612-593-7333</b>	<b>FOR OFFICIAL USE ONLY</b> VPPO NUMBER <b>9100140</b> Filing and Examination Fee: <b>\$2150.-</b> Date <b>Mar. 18, 1991</b> Certificate Fee: <b>\$250.-</b> Date <b>Oct. 6, 1993</b>
6. GENUS AND SPECIES NAME <b>Triticum aestivum</b>	7. FAMILY NAME (Botanical) <b>Gramineae</b>		
8. CROP KIND NAME (Common Name) <b>Soft red winter wheat</b>	9. DATE OF DETERMINATION <b>1985 May</b> <i>AAA 14 Sept 1993 per letter</i>		
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) <b>Corporation</b>			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Delaware</b>		12. DATE OF INCORPORATION <b>1976</b>	

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

~~Warren D. Springer~~ ~~ROBERT W. ROME~~ **JOHN THORNE, N.C.**  
~~Northrup King Co.~~  
~~P. O. Box 959~~  
~~Minneapolis, MN 55440~~  
**P.O. Box 949**  
**WASHINGTON, IA 52353**  
 PHONE (include area code): **612-593-7285**

**AAA 80 Oct 1992**  
**7305 319-653-2181**

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

- a. ☒ Exhibit A, Origin and Breeding History of the Variety.
- b. ☒ Exhibit B, Novelty Statement.
- c. ☒ Exhibit C, Objective Description of Variety.
- d. ☐ Exhibit D, Additional Description of Variety.
- e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.
- f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office \_\_\_\_\_
- g. ☒ Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)

☒ YES (If "YES," answer items 16 and 17 below) ☐ NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☒ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act. Give date: \_\_\_\_\_)  
☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?

☒ YES (If "YES," give names of countries and dates)  
☐ NO

**U.S.A., fall of 1990**

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) <b>Warren D. Springer</b>	CAPACITY OR TITLE <b>Manager, Regulatory Affairs</b>	DATE <b>11 March 1991</b>
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE

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EXHIBIT A

**Origin and Breeding History**  
Amended December 1992

Coker 9024 was derived from a cross of Coker 65-20\*4/Wichita 7-Transfer//Blueboy sel/3/Coker 68-15\*3//Chancellor\*8/CI13836 made in the spring of 1976 at the Coker research facility in Hartsville, SC. The breeding history follows:

SEASON	GENERATION	ACTIVITY
1976	Cross made	Cross identified as x182
1976-77	F1	Seed bulked
1977-78	F2	Seed bulked
1978-79	F3	Seed bulked
1979-80	F4	Heads selected (randomly other than large plump)
1980-81	F5	Head row #6243 selected (LR and PM)
1981-82	F6	Tested as line #82C281 (yield, disease resistance, uniformity)
1982-83	F7	Advanced line 83-29 - heads selected (randomly)
1983-84	F8	Head row #17208 selected (LR, PM, and uniformity)
1984-85	F9	Line #85A-184 tested
1985-86	F10	Advanced testing began
1986-87	F11	Advanced testing continued
1987-88	F12	Elite testing and seed increase made at Bay, AR
1988-89	F13	Elite Testing continued and small increase by NK Production Dept
1989-90	F14	Large increase produced by NK
1990-91	F15	Seed sold to TGN Growers for certified seed production

LR-Leaf rust

PM-Powdery mildew

Purpose of testing is to evaluate yield, agronomic traits, and disease reactions; uniformity and consistency are critical for performance over locations and years.

Coker 9024 has been sexually reproduced for 8 generations; it has exhibited uniformity and stability through each generation.

EXHIBIT B

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Novelty Statement

Amended December 1992

Coker 9024 most closely resembles '9323'. The two varieties can be distinguished by four traits. Coker 9024 is later in heading and taller than 9323. Coker 9024 has a light brown phenol reaction and the coleoptile color is white whereas 9323 has a black brown phenol reaction and a purple coleoptile.

<u>VARIETY</u>	<u>HEADING DATE</u>	<u>HT (in)</u>	<u>PHENOL REACTION</u>	<u>COLEOPTILE COLOR</u>
Coker 9024	4/24	41	light brown	white
9323	4/20	34	black brown	purple
LSD (.05)	4	5.6		

U. S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION  
BELTSVILLE, MARYLAND 20785

EXHIBIT C  
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY  
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Northrup King Co.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P.O. Box 959  
Minneapolis, MN 55440

FOR OFFICIAL USE ONLY

PVPO NUMBER

9100140

VARIETY NAME OR TEMPORARY DESIGNATION

Coker 9024

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g., 089 or 09 ) when number is either 99 or less or 9 or less.

## 1. KIND:

1 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

## 2. TYPE:

2 1 = SPRING 2 = WINTER 3 = OTHER (Specify) 1 1 = SOFT 3 = OTHER (Specify)  
2 = HARD

2 1 = WHITE 2 = RED 3 = OTHER (Specify)

## 3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

1 9 0 FIRST FLOWERING

1 9 5 LAST FLOWERING

## 4. MATURITY (50% Flowering):

0 2 NO. OF DAYS EARLIER THAN 7 1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = Caldwell

0 4 NO. OF DAYS LATER THAN 8 4 = LEMHI 5 = NUGAINES 6 = LEEDS 8 = Coker 916

## 5. PLANT HEIGHT (From soil level to top of head):

1 0 2 CM. HIGH

0 5 CM. TALLER THAN 7

CM. SHORTER THAN  1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = Caldwell  
4 = LEMHI 5 = NUGAINES 6 = LEEDS

## 6. PLANT COLOR AT BOOTING (See reverse):

3 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

## 7. ANTHUR COLOR:

1 1 = YELLOW 2 = PURPLE

## 8. STEM:

2 Anthocyanin: 1 = ABSENT 2 = PRESENT

2 Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

0 4 NO. OF NODES (Originating from node above ground)

1 Waxy bloom: 1 = ABSENT 2 = PRESENT

1 Internodes: 1 = HOLLOW 2 = SOLID

2 3 CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

## 9. AURICLES:

2 Anthocyanin: 1 = ABSENT 2 = PRESENT

2 Hairiness: 1 = ABSENT 2 = PRESENT

## 10. LEAF:

2 Flag leaf at booting stage: 1 = ERECT 2 = RECURVED  
3 = OTHER (Specify):

2 Flag leaf: 1 = NOT TWISTED 2 = TWISTED

1 Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

2 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

1 3 MM. LEAF WIDTH (First leaf below flag leaf)

2 6 CM. LEAF LENGTH (First leaf below flag leaf):

11. HEAD:

☐ 3 Density: 1 = LAX 2 = DENSE 3 = Mid-lax ☐ 2 Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify) \_\_\_\_\_

☐ 2 Awedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

☐ 7 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER (Specify): Light tan

☐ 1 0 CM. LENGTH ☐ 1 0 MM. WIDTH

12. GLUMES AT MATURITY:

☐ 2 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.) ☐ 2 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

☐ 2 Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

☐ 2 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

☐ 1 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

☐ 1 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

☐ 2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

☐ 3 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL to ovate ☐ 1 Check: 1 = ROUNDED 2 = ANGULAR

☐ 2 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG ☐ 1 Brush: 1 = NOT COLLARED 2 = COLLARED

☐ 3 Phenol reaction (See instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

☐ 5 Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) light brown

☐ 0 6 MM. LENGTH ☐ 0 3 MM. WIDTH ☐ 3 4 GM. PER 1000 SEEDS

17. SEED CREASE:

☐ 2 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI' ☐ 2 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant) 3=R/S (race dependent)

☐ 2 STEM RUST (Race) ☐ 2 LEAF RUST (Race) ☐ 1 STRIPE RUST (Race) ☐ 0 LOOSE SMUT

☐ 3 POWDERY MILDEW ☐ 0 BUNT ☐ 2 OTHER (Specify) Septoria tritici

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐ 0 SAWFLY ☐ 0 APHID (Bydv.) ☐ 0 GREEN BUG ☐ 0 CEREAL LEAF BEETLE

☐ OTHER (Specify) \_\_\_\_\_ HESSIAN FLY RACES: ☐ 1 GP ☐ A ☐ B ☐ C ☐ D ☐ 1 E ☐ F ☐ G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Coker 9323	Seed size	Coker 983
Leaf size	Coker 9323	Seed shape	Coker 833
Leaf color	Coker 9323	Coleoptile elongation	Caldwell
Leaf carriage	Coker 9323	Seedling pigmentation	Coker 983

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(a) L.W. Briggie and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.

(b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.

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**Milling and Baking Quality, Coker 9024**

<u>PARAMETER</u>	<u>TEST</u>		
	<u>1990</u> <u>UEN</u>	<u>1991</u> <u>CE</u>	<u>1990</u> <u>CE</u>
<b>MILLING</b>			
Test wt lb/bu	60.6	58.7	60.8
Break flour yield	31.1	--	--
St.gr. flour yield	77.7	76.6	76.4
Friability	30.4	--	--
E.S.I.	8.6	--	--
Softness equiv.	--	59.5	57.9
Flour Ash	0.462	--	--
Millability	110.4	--	--
Score	108.0	98.7	100.8
<b>BAKING</b>			
Flour protein	10.92	9.35	9.01
Micro AWRC	51.2	55.0	53.0
Cookie diameter	17.97	17.5	17.7
Top grain	5	5	2
Score	94.63	102.5	106.7
Standard	Caldwell	Fla 302	Fla 302

UEN: Uniform Eastern Soft Red Winter Wheat Nursery

CE: Northrup King's Commercial Elite Test

EXHIBIT E

9100140

Statement of the Basis of Applicant's Ownership

Wheat variety Coker 9024 was developed by the Northrup King Co. cereals breeding staff from germplasm sources cited in Exhibit A of this application. Northrup King Co. believes that the variety is novel as defined in the Plant Variety Protection Act and, therefore, that Northrup King Co. is the sole owner of the variety.